

## **Comments to the Action Agenda in Hood Canal, draft December 9, 2011**

### **Submitted by the Hood Canal Salmon Enhancement Group**

### **January 2012**

These comments track the text of the draft Action Agenda in Hood Canal. Reference to page and section of text is provided in order to effectively re-locate the original text. There are instances where the current text requires some clarity and those sections were pulled out.

The most significant omission is related to the accomplishments and information gaps posed by the Hood Canal Dissolved Oxygen Program (HCDOP). A significant amount of current action given to Hood Canal can be attributed to the investigation of the HCDOP. Over 40 regional partners (federal, state, county, tribal, NGOs, businesses, communities) contributed to the science portion of the program, and HCDOP currently continues primarily as corrective action discussions through technical committees organized by the Hood Canal Coordinating Council. One of the greatest assets to the HCDOP has been the marine monitoring program which consists of a network of moorings combined with a citizen monitoring program. The datasets derived from these monitoring assets has provided the analysis of forces and conditions contributing to the low dissolved oxygen conditions. The results of the analysis are in part guiding current and proposed corrective actions.

Although the HCDOP has helped to guide corrective actions to this point, the need for greater resolution in measurements of OSS nitrogen removal, shoreline groundwater seeps, and refinement of watershed modeling is critical for evolving our knowledge.

The network of monitoring assets established by HCDOP continues to be vital in evaluating corrective actions (such as sewer systems) as well as evaluating the variability within seasonal conditions.

The network of marine monitoring has also been consistently used as a tool for investigations related to the effects of low dissolved oxygen on the biota, relationships with phytoplankton communities, sediment analysis, and food web relationships.

The current Action Agenda in Hood Canal does not reflect the essential need to maintain the network of marine monitoring.

## **Accomplishments**

(Local Area Actions - page 305 inset)

One of the most significant ‘accomplishments’ related to Hood Canal is the **Hood Canal Dissolved Oxygen Program** investigative study on the causes and implications of chronic and episodic low dissolved oxygen. This is missing in the list of accomplishments!

## **Unique ecosystem characteristics and assets**

(Local Area Actions - page 305 text)

For the purpose of describing and subsequently working to address ecological issues in Hood Canal, it is important to describe the “*Unique ecosystem characteristics and assets*” of **lower Hood Canal** separate from the rest of Hood Canal. Stating the “The human population of the Hood Canal region is low” is misleading when considering the development density around the shoreline of Lynch Cove and lower

Hood Canal. The anthropogenic contributions in this region influence the low dissolved oxygen concentrations as well as closed shellfish beds.

Note: Two of the most important water quality issues in Hood Canal are the annual development of low dissolved oxygen concentrations, and the chronic levels of Fecal coliform bacteria which restrict the harvest of shellfish.

*Text change consideration* (Local Area Actions - page 306 text)

Orca whales **do not** “frequent Hood Canal to feed on prey species indigenous to Hood Canal. “ The only Orca whales to recently enter Hood Canal (2003, 2005) were the transient Orca subspecies which only eats seals. In 2003, eleven transient Orcas spent two months, and in 2005 six transient Orcas spent four months in Hood Canal, at times traveling as far as Twanoh State Park in lower Hood Canal. According to biologist, the duration of these events were unusual.

*Text change consideration* (Local Area Actions - page 306 text)

There are **no old growth forest in close proximity to the marine shoreline** which “provides unique habitats for many bird species and mammals”. Small fragments of old growth forest remain in a few locations of the watershed which help to sustain some animal species which rely on this habitat type.

*Text change consideration* (Local Area Actions - page 306 text)

Not sure what is meant by; “Year-round and seasonal residents and visitors work hard to understand the physical and biological conditions that affect Hood Canal”.

Hood Canal is a blend of long-term residence, residents transplanted from other places, and seasonal residents and visitors which recreate. It is an enormous challenge to provide ecological as well as socio-economic messages to a widespread and diverse populace. There are significant “physical and biological conditions” which need to be communicated to the Hood Canal public.

### **Local Action Agenda Process** (Local Area Actions - page 306 text)

It is recognized the Hood Canal Coordinating Council (HCCC) serves as the Local Integrating Organization (LIO) for the Hood Canal Action Area, and leads the prioritization and implementation of Action Agenda strategies and actions in the Hood Canal Action Area.

**\*What is not clear is how funding will be distributed** to enact the Action Agenda strategies.

### **Key Threats/Pressures** (Local Area Actions - page 307 text)

“There are **thirteen** (**only 11 listed**) regional pressures that endanger the ability of the focal components to function and persist into the future, and are the focus of the region’s pressure reduction objectives.

These include:”

1. Residential / Commercial Development (very high)
2. Transportation / Service Corridors (very high)
3. Climate Change / Severe Weather (very high)
4. Shoreline Infrastructure (Marine and Freshwater) (high)
5. Shoreline Levees (Marine and Freshwater) (high)
6. Water Withdrawal / Diversions (high)
7. Invasive Species (high)
8. Wastewater (high)
9. Stormwater (high)
10. Timber Production (high)

11. Oil / Hazardous Spills (high)
- 12.
- 13.

## **Opportunities, Priorities and Near Term Actions** (Local Area Actions - page 307-309 text)

### *Text change considerations*

#### **General**

- ‘Resolution to the Hood Canal Dissolved Oxygen Program findings’ needs to be a priority within this section. **The peer review process of the program findings needs to be completed**
- Sustaining a **marine monitoring program** to track and assess conditions in Hood Canal is essential, and needs to be included as a ‘general’ consideration.
- Support additional investigation on the effects of low dissolved oxygen on the marine biota.

#### **Wastewater**

- **Continue research** on OSS nitrogen removal, on shoreline groundwater seeps, and watershed modeling.
- Develop and implement a regional continuous ambient monitoring program for the streams, shorelines, and (add) **marine waters of Hood Canal**.

#### **Stormwater**

- Include **marine water monitoring**.

## **Link to Recovery Targets**

The Hood Canal Integrated Watershed Management Planning process has identified several focal ecosystem components and ecosystem pressures relevant to supporting the achievement of Soundwide recovery targets – such as

- reopening shellfish beds,
- addressing stream flows and
- toxic in sediments,
- rebuilding salmon runs, and
- establishing a Puget Sound quality of life index
- **add:** reducing the stress to marine biota from low dissolved oxygen levels.

## **Local Implementation Structure**

Even though the *Integrated Watershed Management Plan* and is synonymous with the *Action Agenda* update, which will be used as the vehicle to provide information to the Puget Sound Partnership, **there needs to be a clear structure for the methods of funding (implementing) the recommended actions provided by the IWMP and other watershed needs... otherwise it is not an implementation ‘structure’**